

# **LOOPS SOLUTIONS**

Solution 1: Hello is printed 2 times.

### Solution 2:

```
import java.util.Scanner;
public class Solution {
   public static void main(String[] args) {
no");
```

## Solution 3:

```
import java.util.Scanner;
public class Solution {
   public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int num; // To hold number
        int fact = 1; // To hold factorial

        System.out.print("Enter any positive integer: ");
        num = sc.nextInt();

        for(int i=1; i<=num; i++) {
            fact *= i;
        }

        System.out.println("Factorial: "+ fact);
    }
}</pre>
```

## Solution 4:

```
import java.util.*;
class MultiplicationTable {
   public static void printMultiplicationTable(int number) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter number:");
        int n = sc.nextInt();
        for(int i=1; i<=10; i++) {
            System.out.println(n + " * " + i + " = " + n*i);
        }
    }
   public static void main(String s[]) {
        printMultiplicationTable(5);
   }
}</pre>
```

## Solution 5:

Scope of variable is referred to the part of the program where the variable can be used.



In this program variable i is declared in the for loop. So scope of variable i is limited to the for loop only that is between  $\{$  and  $\}$  of the for loop. There is a display statement after the for loop where variable i is used which means i is used out of scope. This leads to compilation errors.

The program given will not run and give an error instead. To correct the program, the variable i needs to be declared outside the for loop.

